

REMARKS

As a preliminary, Applicant and Applicant's representative thank the Examiner for the telephone discussion of July 9, 2009, in which claims 1 was discussed with respect to the art rejection and claim 8 was discussed with respect to the indefiniteness rejection. The amendment of claim 1 to recite "2 h to 100 h" and the amendment of claim 8 to recite "the hydrogen" were made to reflect the discussion at the interview.

Claim 1 has also been amended to recite that crystallization is avoided and the solution remains in the form of a viscous liquid.

Support for the added recitations in claim 1 is found in the original application, for example, on page 4, lines 9-11 and page 5, lines 17-18.

Further, claims 1 and 7 have been presented with separate paragraphs for the successive steps and using active verbs to recite that the method comprises steps of "subjecting, holding, heating or cooling" in claim 1, and "causing to react, extracting, subjecting" in claim 7.

Claim 10 has been canceled without prejudice or disclaimer.

New claims 11-13 have been added to recite that the holding temperature is held for a time lying in the range 8 h to 100 h, that the holding temperature is held for a time lying in the range 15 h to 100 h, and that the initial temperature is in a range from 100 to 180°C, and the storage temperature is in a range from -20 to 50°C, respectively.

Support for the added recitations is found in the original application, for example, on page 5, lines 4-9 (claims 11-12) and page 3, line 7 and page 4, lines 19-20 (claim 13).

Claims 1-9 and 11-13 are pending in the present application. Claim 1 is the only

independent claim.

I. Indefiniteness and lack of utility rejection

In the Office Action, claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as indefinite. Further, claims 8-10 are rejected under 35 U.S.C. 101 as lacking utility. It is alleged in the Office Action that that claims 8-10 do not recite any active step.

Claim 8 has been amended to recite “the” before “hydrogen.” Thus, claim 8 recites an additional step of feeding the hydrogen to a fuel cell, and claim 9 specifies the fuel cell of claim 8. Claim 10 has been canceled.

In view of the above, it is submitted that the rejections should be withdrawn.

II. Art rejections

In the Office Action, claims 1-10 are rejected under 35 U.S.C. 103(a) as obvious over US 20040052722 to Jorgensten et al. (“Jorgensten”) in view of US20030118504 to Mazza et al. (“Mazza”).

Also, claim 10 is rejected under 35 U.S.C. 103(a) as obvious over Jorgensten in view of Mazza and further in view of US 5167788 to Hardee et al. (“Hardee”).

Reconsideration and withdrawal of the rejections is respectfully requested. As discussed at the interview, Jorgensten discloses hydrogen generation and Mazza discloses a heat treatment. However, the cooling treatment of Mazza is designed to precipitate the sodium borate, so as to remove the precipitate. Thus, the objective of Mazza is contrary to the objective in the present invention, which is to avoid precipitation.

More specifically, the cooling treatment of Mazza starts with a solution at a temperature

of about 30 to 60 degrees C, preferably about 50 degrees C (para 0046). A first step of cooling down to about 25 to 55 degrees C, preferably about 35 degrees C (para 0047) is followed by a second step of further cooling down to about 15 to 45 degrees C, for example, 20 degrees C (para 0048). However, there is no phase of holding a temperature between the two cooling phases, i.e., Mazza performs a direct transfer to and from the reactor and heat exchangers where cooling takes place.

In contrast, in the presently claimed invention, a first cooling or heating step is followed by holding the holding temperature for a time lying in the range 2 h to 100 h, followed by a second cooling or heating step, as recited in present claim 1.

An advantage of the feature of the presently claimed invention is that it is possible to avoid crystallization so that the solution remains in the form of a viscous liquid, as explained in the present specification, for example on page 5, lines 17-18. Mazza provides no suggestion or incentive to arrive at this feature of the presently claimed invention. On the contrary, Mazza intends to promote precipitation and benefits from quickly returning the solution to the reactor. Therefore, the disclosure of Mazza actually teaches against purposefully maintaining a holding temperature between cooling steps, and provide no guidance regarding keeping a solution in the form of a viscous liquid. Further, the other cited references fail to remedy this deficiency of Mazza. Therefore, the present claims are not obvious over the cited references taken alone or in any combination.

In addition, with respect to each of the dependent claims, it is submitted that the combined features of these respective claims are not taught or suggested in the cited references

taken alone or in any combination. Therefore, each of the dependent claims is not obvious over the cited references taken alone or in any combination.

In view of the above, it is submitted that the rejections should be withdrawn.

Conclusion

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 502759.

Respectfully submitted,

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